

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

AN UNDESCRIBED EASTERN COTTON RAT

BY MARSHALL C. GARDNER

During the course of a revision of the North American cotton rats (Genus *Sigmodon*) the author discovered another hitherto unrecognized subspecies. It is described as follows:

Sigmodon hispidus komareki,¹ subsp. nov.

Type specimen.—Adult ♂, skin and skull, No. 207210, U. S. National Museum (Biological Surveys Collection); collected March, 9, 1915, by L. J. Goldman; original number, 2128.

Type locality.—Woodville, altitude 616 feet, Jackson County, Alabama.

Geographic range.—Not completely known but includes most of the area above the hundred foot altitude line in Alabama, Georgia, North and South Carolina. Specimens have also been examined from one locality in southeastern Tennessee. The most typical specimens examined occurred at the higher altitudes. Carolinian and Austroriparian life zones.

Diagnostic characters.—At once distinguishable from *Sigmodon hispidus hispidus* by the buffy upper parts which are also less mixed with black hairs than typical *hispidus*. Under parts fairly uniformly light colored varying from white to cream in contrast to *hispidus* which varies from white to brown. The feet average considerably paler than in *dispidus*. Cranial characters similar to *dispidus*.

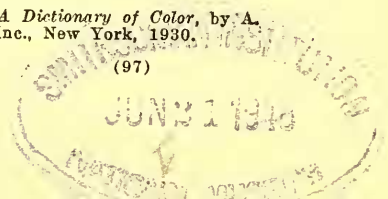
Color.²—*Type*: Upper parts honey sweet (XI I-6) mixed with black, becoming richer posteriorly and paler on the flanks; under parts a shade of cream but color not named (IX C-1); tail bicolor, rose ebony (VIII E-6) above, paler beneath.

Skull.—Similar to that of *hispidus*.

Measurements.—*Type*: Total length, 266; tail vertebrae, 99; hind foot, 31; condyloincisive length, 34.7; length of anterior palatine foramina, 8.0; palatal bridge, 7.7; nasal length, 13.9; zygomatic breadth, 20.0; least interorbital breadth, 5.5; cranial breadth, 14.1; maxillary tooth row, 6.4.

¹Named for Edwin V. Komarek of Thomasville, Georgia, in recognition of his cooperation with the Section of Biological Surveys of the U. S. Fish and Wildlife Service.

²The color names and symbols are those used in *A Dictionary of Color*, by A. Maerz and M. Paul; McGraw-Hill Book Company, Inc., New York, 1930.



STATISTICS ON 31 ADULT MALE SPECIMENS³

Character	Mean	Standard Deviation	Observed Range	Variation Coefficient
Total length -----	265	13.9	248-292	5.27
Tail length -----	104	9.3	89-124	8.90
Body length -----	161	8.1	146-181	5.05
Foot length -----	32	0.4	29-34	1.35
Condylolncisive length --	33.5	1.2	32.0-35.9	3.56
Anterior palatine foramina length -----	8.1	0.5	7.2-9.1	5.71
Palatal length -----	6.7	0.5	6.1-7.9	5.08
Nasal length -----	13.8	0.7	12.3-15.3	5.37
Zygomatic breadth -----	19.9	0.7	18.6-21.4	3.71
Least interorbital breadth	5.1	0.3	4.7-5.8	5.00
Cranial breadth -----	14.0	0.5	13.2-15	3.98
Maxillary tooth row -----	6.2	0.25	5.7-6.6	3.71

Remarks.—Intergradation with *S. h. hispidus* occurs on both sides of the hundred foot line. Specimens from Dean, Alabama, and Elkin, North Carolina are included on geographic grounds but resemble *hispidus*.

Specimens examined.—Total 160, all in the National Museum or Biological Surveys collection, from the following localities.

ALABAMA: *Autauga County*: Autaugaville, 1. *Bibb County*: Sand Mountain, 1. *Clay County*: Dean, 2; Erin, 2. *Conecuh County*: Castleberry, 1. *Cullman County*: Ardell, 2. *Hale County*: Gallion, 4; Greensboro, 6. *Henry County*: Abbeville, 2. *Houston County*: Ashford, 5. *Jackson County*: Woodville, 8. *Lee County*: Auburn, 3. *Madison County*: Huntsville, 1. *Marshall County*: Cane Creek, 1. *Montgomery County*: Barachias, 2. *Russell County*: Seale, 7. *Wilcox County*: Catherine, 1.

GEORGIA: *Berrien County*: Nashville, 1. *Cherokee County*: Canton, 2. *Cobb County*: Marietta, 5; no locality 1. *De Kalb County*: Camp Gordon, 3. *Early County*: Blakely, 2. *Fulton County*: Fort McPherson, 5. *Murray County*: Chatsworth, 2. *Muscogee County*: East Point, 1. *Richmond County*: Augusta, 2. *Spalding County*: Pomona, 2. *Stephens County*: Avalon, 9. *Taylor County*: Butler, 5. *Towns County*: Young Harris, 3.

NORTH CAROLINA: *Anson County*: Wadesboro, 2. *Cherokee County*: Murphy, 5. *Richmond County*: Rockingham, 9. *Surry County*: Elkin, 1. *Wake County*: Raleigh, 33.

SOUTH CAROLINA: *Darlington County*: Society Hill, 6. *Laurens County*: Clinton, 1. *McCormick County*: McCormick, 5. *Newberry County*: Whitmire, 2. *Oconee County*: Walhalla, 2. *Pickens County*: Easley, 1.

TENNESSEE: *Hamilton County*: Rathburn, 1.

U. S. Fish and Wildlife Service, Washington, D. C.

³From localities throughout the range.